

ABSTRACT OF THE DISCLOSURE

Methods and apparatus of performing polarization control for optical transmissions are provided. The methods and apparatus enable polarization control devices to achieve a desired output state of polarization regardless of the input state of polarization. The desired state of polarization can be achieved by rotating waveplates in a polarization controller in a sequential fashion. Each waveplate may be continually adjusted or dithered so long as the feedback signal satisfies a feedback condition. Once the feedback signal exceeds the feedback condition, the next waveplate in the polarization controller is adjusted. This enables the methods and apparatus to rapidly adjust the state of polarization away from dead spots and minimize loss control problems.

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